

## ABSTRACT OF THE DISCLOSURE

A user with hand or stylus inputs information to a companion system such as a PDA, a cell telephone, an appliance, or other device using a virtual input  
5 device such as an image of a keyboard. A sensor captures data representing a single image at a given time, from which data three-dimensional positional information as to if, when in time, and where on the virtual input device user-interaction or contact occurred. The processed digital information is output to the companion system. In a virtual keyboard application, the companion  
10 system can display an image of a keyboard, including an image of a keyboard showing user fingers, and/or alphanumeric text as such data is input by the user on the virtual input device.

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